

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/538,793  
Source: IFWO  
Date Processed by STIC: 3/20/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 03/20/2006

PATENT APPLICATION: US/10/538,793

TIME: 12:06:19

Input Set : A:\JP2003-15835seq.txt

Output Set: N:\CRF4\03202006\J538793.raw

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3 <110> APPLICANT: TAKARA BIO INC.
5 <120> TITLE OF INVENTION: Cold-inducible expression vector
7 <130> FILE REFERENCE: 664200
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/538,793
C--> 9 <141> CURRENT FILING DATE: 2005-06-01
9 <150> PRIOR APPLICATION NUMBER: JP 2002-359956
10 <151> PRIOR FILING DATE: 2002-12-11
12 <160> NUMBER OF SEQ ID NOS: 20
14 <170> SOFTWARE: PatentIn Ver. 2.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 1209
18 <212> TYPE: DNA
19 <213> ORGANISM: Escherichia coli
21 <400> SEQUENCE: 1
22 aagcttcgat gcaattcacg atccccgcagt gtgatttgag gagttttcaa tggaatataa 60
23 agatccaatg catgagctgt tgagcagcct ggaacagatt gttttttaaag atgaaacgca 120
24 gaaaattacc ctgacgcaca gaacaacgtc ctgtaccgaa attgagcagt tacgaaaagg 180
25 gacaggatta aaaatcgatg atttcgcccc ggttttgggc gtatcagtcg ccatggtaaa 240
26 ggaatgggaa tccagacgcg tgaagccttc aagtgccgaa ctaaaaattga tgcgtttgat 300
27 tcaagccaac ccggcattaa gtaagcagtt gatggaatag acttttatcc actttattgc 360
28 tgtttacggt cctgatgaca ggaccgtttt ccaaccgatt aatcataaat atgaaaaata 420
29 attgttgcat caccgcgcaa tgcgtggctt aatgcacatc aacggtttga cgtacagacc 480
30 attaaagcag tgtagtaagg caagtcctt caagagttat cgttgatacc cctcgtagt 540
31 cacattcctt taacgcttca aaatctgtaa agcacgccat atcgccgaaa ggcacactta 600
32 attattaaag gtaatacact atgtccggta aaatgactgg tatcgtaaaa tggttcaacg 660
33 ctgacaaaagg cttcggcttc atcactcctg acgatggctc taaagatgtg ttcgtacact 720
34 tctctgctat ccagaacgat ggttacaaat ctctggacga aggtcagaaa gtgtccttca 780
35 ccacgcgaaa cggcgctaaa ggcccggcag ctggtaacgt aaccagcctg taatctctgc 840
36 ttaaaagcac agaatctaag atccctgcc tttggcgggg atttttttat ttgttttcag 900
37 gaaataaata atcgatcgcg taataaaatc tattattatt tttgtgaaga ataaatttgg 960
38 gtgcaatgag aatgcgcaac gccgtaagta aggcgggaat aatttcccgc cgaagactct 1020
39 tactctttca atttgcaggc taaaaacgcc gccagctcat aactctcctg tttaatatgc 1080
40 aattcacaca gtgaatctct tatcatccag gtgaaaaata aaagcgtgaa acaaatcact 1140
41 attaaagaaa gtaatctata tttctgcgca ttccagctct gtgttgattt cacgagtatg 1200
42 tactgcacc 1209
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46 <211> LENGTH: 164
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Modified 5' Untranslated Region of cspA Gene
53 <400> SEQUENCE: 2
54 aaattgtgag cggataacaa tttgatgtgc tagcgcatat ccagtgtagt aaggcaagtc 60

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55 ccttcaagag cctttaacgc ttcaaaatct gtaaagcacg ccatatcgcc gaaaggcaca 120
56 cgagcggata acaatttcac attaattatt aaaggtaata cacc 164
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 156
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: Modified 5' Untranslated Region of cspA Gene
67 <400> SEQUENCE: 3
68 aaattgtgag cggataacaa tttgatgtgc tagcgcatat ccagtgtagt aaggcaagtc 60
69 ccttcaagag cctttaacgc ttcaaaatct gtaaagcacg ccatatcgcc gaaaggcaca 120
70 catgttttgt agattaatta ttaaaggtaa tacacc 156
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 176
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Modified 5' Untranslated Region of cspA Gene
81 <400> SEQUENCE: 4
82 aaattgtgag cggataacaa tttgatgtgc tagcgcatat ccagtgtagt aaggcaagtc 60
83 ccttcaagag cctttaacgc ttcaaaatct gtaaagcacg ccatatcgcc gaaaggcaca 120
84 catgttttgt agatttgaaa gagtagatta gtattaatta ttaaaggtaa tacacc 176
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 144
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Modified 5' Untranslated Region of cspA Gene
95 <400> SEQUENCE: 5
96 aaattgtgag cggataacaa tttgatgtgc tagcgcatat ccagtgtagt aaggcaagtc 60
97 ccttcaagag cctttaacgc ttcaaaatct gtaaagcacg ccatatcgcc gaaaggcaca 120
98 cttaattatt aaaggtaata cacc 144
101 <210> SEQ ID NO: 6
102 <211> LENGTH: 40
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Synthetic Primer for PCR
109 <400> SEQUENCE: 6
110 gtgcggataa caatttcaca ttaattatta aaggtaatac 40
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Synthetic Primer for PCR
121 <400> SEQUENCE: 7
122 tgcgcattct cattgcaccc 20
125 <210> SEQ ID NO: 8

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126 <211> LENGTH: 40
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Synthetic Primer for PCR
133 <400> SEQUENCE: 8
134 tgtgaaattg ttatccgctc gtgtgccttt cggcgatatg          40
137 <210> SEQ ID NO: 9
138 <211> LENGTH: 31
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Synthetic Primer for PCR
145 <400> SEQUENCE: 9
146 gttttcccgtagccaaatt gtgagcggat a          31
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Synthetic Nucleotide inserted into 5' Untranslated Region of
cspA Gene
157 <400> SEQUENCE: 10
158 gagcggataa caatttcaca          20
161 <210> SEQ ID NO: 11
162 <211> LENGTH: 38
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Synthetic Primer for PCR
169 <400> SEQUENCE: 11
170 aagataacaa aggaattcga gtaaaggaga agaacttt          38
173 <210> SEQ ID NO: 12
174 <211> LENGTH: 37
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Synthetic Primer for PCR
181 <400> SEQUENCE: 12
182 tctggacatt ctagattatt tgtatagttc atccatg          37
185 <210> SEQ ID NO: 13
186 <211> LENGTH: 36
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetic Primer for PCR
193 <400> SEQUENCE: 13
194 ccatccatgg aattcggcta ttcctgcacc aactga          36
197 <210> SEQ ID NO: 14
198 <211> LENGTH: 36

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199 <212> TYPE: DNA
200 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
203 <223> OTHER INFORMATION: Synthetic Primer for PCR
205 <400> SEQUENCE: 14
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209 <210> SEQ ID NO: 15
210 <211> LENGTH: 52
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Synthetic Primer for PCR
217 <400> SEQUENCE: 15
218 catatcgccg aaaggcacac atgttttgta gattaattat taaaggtaat ac          52
221 <210> SEQ ID NO: 16
222 <211> LENGTH: 52
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Synthetic Primer for PCR
229 <400> SEQUENCE: 16
230 gtattacctt taataattaa tctacaaaac atgtgtgcct ttcggcgata tg          52
233 <210> SEQ ID NO: 17
234 <211> LENGTH: 12
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Synthetic Nucleotide inserted into 5' Untranslated Region of
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241 <400> SEQUENCE: 17
242 atgttttgta ga          12
245 <210> SEQ ID NO: 18
246 <211> LENGTH: 52
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Synthetic Primer for PCR
253 <400> SEQUENCE: 18
254 atgttttgta gatttgaaaag agtagattag tattaattat taaaggtaat ac          52
257 <210> SEQ ID NO: 19
258 <211> LENGTH: 52
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: Synthetic Primer for PCR
265 <400> SEQUENCE: 19
266 tactaatcta ctctttcaaa tctacaaaac atgtgtgcct ttcggcgata tg          52
269 <210> SEQ ID NO: 20
270 <211> LENGTH: 32
271 <212> TYPE: DNA

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Input Set : A:\JP2003-15835seq..txt

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272 &lt;213&gt; ORGANISM: Artificial Sequence

274 &lt;220&gt; FEATURE:

275 <223> OTHER INFORMATION: Synthetic Nucleotide inserted into 5' Untranslated Region of  
cspA Gene

277 &lt;400&gt; SEQUENCE: 20

278 atgttttgta gatttgaaag agtagattag ta

32

## RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 03/20/2006

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TIME: 12:06:20

Input Set : A:\JP2003-15835seq..txt

Output Set: N:\CRF4\03202006\J538793.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:10; Line(s) 155

Seq#:17; Line(s) 239

Seq#:20; Line(s) 275

**VERIFICATION SUMMARY**

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Input Set : A:\JP2003-15835seq..txt

Output Set: N:\CRF4\03202006\J538793.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date